

Claims

What is claimed is:

1. A spoken language interface mechanism for enabling a user to provide spoken input to at least one computer implementable application, the spoken language interface mechanism comprising:
 - an automatic speech recognition (ASR) mechanism operable to recognise spoken input from a user and to provide information corresponding to a recognised spoken term to a control mechanism, said control mechanism being operable to determine whether said information is to be used as input to a current context, and conditional on said information being determined to be input for said current context, to provide said information to said current context, wherein said control mechanism is further operable to switch context conditional on said information being determined not to be input for said current context.
2. A spoken language interface mechanism according to Claim 1, further comprising a speech generation mechanism for converting at least part of any output to speech.
3. A spoken language interface mechanism according to Claim 1, further comprising a session management mechanism operable to track the user's progress when performing one or more tasks.
4. The spoken language interface mechanism of Claim 3, wherein the session management mechanism is operable to track one or more reached position when one or more said tasks and/or dialogues are being performed and subsequently to reconnect the user at one said reached position.

5. A spoken language interface mechanism according to Claim 1, further comprising an adaptive learning mechanism operable to personalise a response of the spoken language interface mechanism according to the user.
6. A spoken language interface mechanism according to Claim 1, further comprising an application management mechanism operable to integrate external services with the spoken language interface mechanism.
7. A spoken language interface mechanism according to Claim 1, wherein at least one said application is a software application.
8. A spoken language interface mechanism according to Claim 1, wherein at least one of the automatic speech recognition mechanism and the control mechanism are implemented by computer software.
9. A spoken language interface according to Claim 1, wherein the control mechanism is operable to provide said information to said at least one application when non-directed dialogue is provided as spoken input from a user.
10. A spoken language interface mechanism according to Claim 1, further comprising a notification manager.
11. A computer system including the spoken language interface mechanism according to Claim 1.
12. A program element including program code operable to implement the spoken language interface mechanism according to Claim 1.
13. A computer program product on a carrier medium, said computer program product including the program element of Claim 12.

14. A computer program product on a carrier medium, said computer program product including program code operable to provide a control mechanism operable to provide recognised spoken input recognised by an automatic speech recognition mechanism as an input to a current context, conditional on said spoken input being determined to be input for said current context, and further operable to switch context conditional on said information being determined not to be input for said current context.
15. A computer program product according to Claim 14, wherein the control mechanism is operable to provide said information to at least one application when non-directed dialogue is provided as spoken input from a user.
16. A computer program product according to Claim 14, wherein the carrier medium includes at least one of the following set of media: a radio-frequency signal, an optical signal, an electronic signal, a magnetic disc or tape, solid-state memory, an optical disc, a magneto-optical disc, a compact disc and a digital versatile disc.
17. A spoken language system for enabling a user to provide spoken input to at least one application operating on at least one computer system, the spoken language system comprising:
 - an automatic speech recognition (ASR) mechanism operable to recognise spoken input from a user; and
 - a control mechanism configured to provide to a current context spoken input recognised by the automatic speech recognition mechanism and determined by said control mechanism as being input for said current context, wherein said control mechanism is further operable to switch context conditional that said spoken input is determined not to be input for said current context.
18. A spoken language system according to Claim 17, wherein the control mechanism is operable to provide said spoken input recognised by the ASR to said at least one application when non-directed dialogue is provided as spoken input from a user.

19. A spoken language system according to Claim 17, further comprising a speech generation mechanism for converting at least part of any output to speech.
20. A method for providing user input to at least one application, comprising the steps of:
 configuring an automatic speech recognition mechanism to receive spoken input;
 operating the automatic speech recognition mechanism to recognise spoken input;
 and
 providing to a current context spoken input determined as being input for said current context, or switching context conditional on said spoken input being determined not to be input for said current context.
21. A method according to Claim 20, wherein the provision of the recognised spoken input to said at least one application is not conditional upon the spoken input following a directed dialogue path.
22. A method of providing user input according to Claim 20, further comprising the step of converting at least part of any output to speech.
23. A method of providing user input according to Claim 20, further comprising the step of:
 tracking one or more reached position of the user when performing one or more tasks and/or dialogues.
24. The method of Claim 23, further comprising the step of subsequently reconnecting the user to a task or dialogue at one said reached position.
25. A development tool for creating components of a spoken language interface mechanism for enabling a user to provide spoken input to at least one computer implementable application, said development tool comprising an application design tool operable to create at least one dialogue defining how a user is to interact with the spoken language interface mechanism, said dialogue comprising one or more inter-

linked nodes each representing an action, wherein at least one said node has one or more associated parameter that is dynamically modifiable while the user is interacting with the spoken language interface mechanism.

26. A development tool according to Claim 25, wherein the action includes one or more of an input event, an output action, a wait state, a process and a system event.
27. A development tool according to Claim 25, wherein the application design tool provides said one or more associated parameter with an initial default value or plurality of default values.
28. A development tool according to Claim 25, wherein said one or more associated parameter is dynamically modifiable in dependence upon the historical state of the said one or more associated parameter and/or any other dynamically modifiable parameter.
29. A development tool according to Claim 25, further comprising a grammar design tool operable to provide a grammar in a format that is independent of the syntax used by at least one automatic speech recognition system.
30. A development suite comprising a development tool according to Claim 25